

1   **ABSTRACT**

2           A method of improving performance and power utilization of portable a  
3   CD player with an electronic anti-shock system (EASS) is disclosed. When PCM  
4   signals are received by the EASS, the audio signals are compressed with a high  
5   compression rate algorithm and saved in a temporary memory, and later when  
6   the audio data are read out from the temporary memory, the audio data are  
7   decoded with the same audio compression algorithm to restore to the original  
8   PCM format, thus a data buffering is created between the reading of data and the  
9   playback of sound. A high compression rate algorithm can increase the  
10   utilization of DRAM memory and lengthen the buffering time considerably. The  
11   present invention has incorporated an audio compression algorithm having high  
12   compression rate in the EASS to attain the most desirable balance point between  
13   audio performance, power management, and costs.